

CH-AA-ANLE-ANLEAPS-2004-0003

NOTIFICATION

Occurrence Report

After 2003 Redesign

Advanced Photon Source

(Name of Facility)

Accelerators

(Facility Function)

Argonne National Laboratory East

Argonne National Laboratory - East

(Laboratory, Site, or Organization)

Name: HISLOP, RICHARD D**Title:** Site Operations Manager**Telephone No.:** (630) 252-4600

(Facility Manager/Designee)

Name: BROCKER, WILLIAM A**Title:** SENIOR SAFETY ADVISOR**Telephone No.:** (630) 252-1186

(Originator/Transmitter)

Name: Richard Hislop**Date:** 09/20/2004

(Authorized Classifier (AC))

1. Occurrence Report Number: CH-AA-ANLE-ANLEAPS-2004-0003

Laser Eye Injury

2. Report Type and Date: NOTIFICATION

	Date	Time
Notification:	09/21/2004	10:20 (ETZ)
Initial Update:		(ETZ)
Latest Update:		(ETZ)
Final:		(ETZ)

3. Significance Category: 3**4. Division or Project:** Advanced Photon Source

5. Secretarial Office: SC - Science

6. System, Bldg., or Equipment: 401/L3119

7. UCNI?: No

8. Plant Area: 400 Area

9. Date and Time Discovered: 09/20/2004 11:00 (CTZ)

10. Date and Time Categorized: 09/20/2004 17:00 (CTZ)

11. DOE HQ OC Notification:

Date	Time	Person Notified	Organization
NA	NA	NA	NA

12. Other Notifications:

Date	Time	Person Notified	Organization
09/20/2004	13:00 (CTZ)	Adam Cohen	EQO
09/20/2004	16:00 (CTZ)	Peter Washburn	AAO

13. Subject or Title of Occurrence:

Laser Eye Injury

14. Reporting Criteria:

2A(5) - Personnel exposure to chemical, biological or physical hazards above limits established by the Occupational Safety and Health Administration (refer to 29 CFR Part 1910) or American Conference of Governmental Industrial Hygienists.

15. Description of Occurrence:

While aligning the diagnostics for an ultrafast Ti:Sapphire class 4 laser (800 nm) an experimenter raised his laser safety eyewear to rub his eye to alleviate an irritation due to an existing eye infection. As he displaced his personal protective equipment he felt a bright flash and afterwards a light cloudiness in his left eye.

Repairs on the laser which had been going on for several months were completed earlier in the day. In his eagerness to get his experiment underway the experimenter introduced beam onto the table while he aligned the optics. To obtain the signal he wanted he rotated one of the polarizing beam splitters. In doing so an unwanted/undetected beam left the plane of the table which subsequently struck his eye.

16. Is Subcontractor Involved? No

17. Operating Conditions of Facility at Time of Occurrence:

Does not apply

18. Activity Category:

12 - Research

19. Immediate Actions Taken and Results:

The experimenter was evaluated by an ophthalmologist who determined that he suffered very minor eye injuries resulting in vitreous floaters that will dissipate over time. He is scheduled for a second evaluation tomorrow.

All laser operations at the APS were suspended pending investigation of this incident.

20. ISM:

- 2) Analyze the Hazards
- 3) Develop and Implement Hazard Controls

21. Cause Code(s):

22. Description of Cause:

23. Evaluation (by Facility Manager/Designee):

During the initial assessment of the situation it has been established that the experimenter was approved to work on the lasers to the point where they were functioning as intended.

He was not authorized to extract beam onto the table. A Laser Standard Operating Procedure has been submitted, but was still being reviewed. The laser configuration on the table had not been inspected or approved by the Laser Safety Officer and Division Director.

24. Is Further Evaluation Required?: Yes

If YES - Before Further Operation? Yes

By whom? Jim Lang

By when? 09/28/2004

25. Corrective Actions

(* = Date added/revised since final report was approved.)

26. Lessons Learned:

27. Similar Occurrence Report Numbers:

28. User-defined Field #1:**29. User-defined Field #2:**

30. HQ Keyword(s):

31. DOE Facility Representative Input:

32. DOE Program Manager Input: